ATRACTOCERA LATIPES MEIGEN, 1804 (INSECTA, DIPTERA, SIMULIIDAE): PROPOSED CONSERVATION IN THE COMMON USAGE WITH REJECTION OF THE PRESUMED HOLOTYPE UNDER THE PLENARY POWERS. Z.N.(S.)2393

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Atractocera latipes was described by Meigen, 1804, p. 96, with the following statement 'Ich fing nur einmal ein Männchen im Mai in einer Hekke'. It is evident from Meigen's detailed autobiography, published by Morge in 1974, that up to 1804 Meigen collected only in the vicinity of Stolberg, near Aachen, and possibly near Solingen. The former is presumed to be the type locality. From the same source it is clear that up to 1804 Meigen had not received material from other zoologists. Meigen's original colour-drawing of the species was published by Morge, 1976.

2. Edwards, 1915 and 1920, following the interpretation of earlier authors, published good descriptions and figures of adults and early stages of *A. latipes*, which promoted more exact identification of the species by subsequent workers. Rubtsov, 1956; 1959–1964 and Davies, 1966; 1968 showed that a number of closely related species, differing mainly in characters of early stages, are united under 'latipes' and restricted the use of the name.

3. The species (and even more the species-complex) under consideration is very common and widely distributed (from western Europe at least as far east as Lake Baikal, with numerous more or less doubtful records as far as Japan and outside the Palaearctic region). As a very active bloodsucker it has great medical and veterinary importance. It is included in many monographs (e.g. Rubtsov, 1940; 1956; 1959–1964; Pavlovsky, 1951; Grenier, 1953; Ussova, 1961; Carlsson, 1962; Knoz, 1965; Davies, 1966; 1968), in many Bulletins of WHO (the World Health Organisation) and in hundreds of papers dealing with its faunistic and ecological significance and the control of bloodsucking insects.

4. Atractocera latipes is the type species of Cnetha Enderlein, 1921 and of its junior synonymn Pseudonevermannia Baranov, 1926, the first being regarded as a distinct genus by the majority of modern specialists in the group. It is a large genus (about ninety species) distri-

buted all over the Holarctic region.

5. Davies (in Crosskey & Davies, 1972) examined two specimens standing under the name 'latipes' in Meigen's collection, one a male with the label 'latipes' 'in what appears to be Meigen's handwriting' and one a female. The male belongs to Simulium subexcisum Edwards, 1915, now in the genus Hellichiella Rivosecchi & Cardinali, 1978, and the specific name is in current general usage as defined under Article

79b of the Code. The female belongs to *Simulium austeni* Edwards, 1915 (*posticatum* Meigen, 1838, a forgotten name).

6. Crosskey & Davies (1972) concluded that the male is Meigen's

holotype, and changed the name S. subexcisum to S. latipes.

7. As *latipes* sensu Edwards remained without an available name Crosskey & Davies, 1972, used the name *Simulium vernum* Macquart, 1826 for it. The latter was described probably from northern France (the exact locality was not indicated in the description) and had since remained a doubtful name, mentioned in catalogues only. The types are lost and a neotype was not designated by Crosskey & Davies, 1972, due to the absence of French material. The original description is very short and, although it does not conflict with *latipes* sensu Edwards, it can be attributed to many other species.

8. The nomenclature of Crosskey & Davies, 1972, was followed by them and by Zwicky & Crosskey, 1980, but many specialists (e.g. J. Knoz, V. Patrusheva, L. Rivosecchi, I. A. Rubtsov, J. Smart, A. Terterian, Z. Ussova) and many practical workers continue to use

the name latipes in Edwards' sense.

9. Crosskey & Davies' 1972 statement, that the male examined by them is the holotype of *A. latipes*, is doubtful. After 1804 Meigen was in contact with many entomologists and his collection was greatly enlarged by his own findings and by material sent to him from various European countries. In 1840 his collection was purchased by the Muséum National d'Histoire Naturelle in Paris. As shown by Zwick & Crosskey, 1980, some of Meigen's type specimens of simuliids were lost between 1804 and 1840 and some specimens (including the female under 'latipes') were added after original publication. As Meigen's specimens have no collecting labels, it is impossible to state whether the male labelled 'latipes' is the holotype or a subsequently added specimen.

10. S. subexcisum Edwards is only known from England (the type locality is Crowborough, Sussex, holotype: male, in the Museum of Zoology, Cambridge) and France. The nearest record of S. subexcisum to the type locality of A. latipes (which is near Aachen) is in the environs of Strasbourg, at a distance of about 260 kilometres. S. subexcisum has never been found in West Germany, the fauna of which is well known. It can be supposed that the male, examined by Davies, originates from material received from France or England by Meigen

after 1804.

11. In Meigen's figure of A. latipes (see Morge, 1976) the basitarsus of the hind leg is broader than the tibia. This agrees better with latipes in the common sense (in which the basitarsus is equal or slightly broader than the tibia) than with subexcisum (in which the basitarsus is broad, but narrower than the tibia). Meigen had special training in drawing (see Morge, 1974) and his figures are very precise.

12. Regardless of the doubtful status of the presumed holotype, this is certainly a case in which the plenary powers should be used, firstly

because two names in general current usage are changed (one of them belongs to a species of great importance and the type species of a large genus) and secondly because the change of names introduces confusion. The designation of a neotype of A. latipes in accordance with common usage is desirable, but I have no material from West Germany. I think Mrs H. Zwick, who has a large amount of material of this common species from West Germany, could propose an appropriate specimen.

13. The International Commission on Zoological Nomenclature

is therefore asked:

(1) to set aside under the plenary powers the specimen MNHN, Paris, No. 525, considered by Crosskey & Davies, 1972, as the holotype of Atractocera latipes Meigen, 1804 and to state that this species should be treated in the sense used by Edwards, 1915; 1920; Rubtsov, 1956; 1959-1964 and Davies, 1966; 1968 or as defined by the neotype, if a corresponding designation can be made:

(2) to place the name latipes Meigen, 1804, as published in the binomen Atractocera latipes and as defined under the plenary powers in (1) above, on the Official List of Specific

Names in Zoology.

REFERENCES

BARANOV, N. 1926. Eine neue Simuliiden-Art und einige Bemerkungen über das System der Simuliiden. Wiss. Insektenbiol. vol. 3, pp. 15-16.

CARLSSON, G. 1962. Studies on Scandinavian black-flies. Opuscula entomol.,

Suppl. XXI, 280 pp.

CROSSKEY, R. W. & DAVIES, L. 1972. The identities of Simulium lineatum (Meigen), S. latipes (Meigen) and S. vernum Macquart (Diptera: Simuliidae). Entomologist's Gaz. vol. 23(4), pp. 249-258.

DAVIES, L. 1966. The taxonomy of British black-flies (Diptera: Simuliidae). Trans. r. entomol. Soc. London, vol. 118(14), pp. 413-506.

-1968. A key to the British species of Simuliidae (Diptera) in the larval, pupal and adult stages. Scient. publs freshwat. biol. Assoc. No. 24, 125

EDWARDS, F. W. 1915. On the British species of Simulium.—I. The adults.

Bull. entomol. Res. vol. 6, pp. 23-42.

-1920. On the British species of Simulium.-II. The early stages; with corrections and additions to Part I. Bull. entomol. Res. vol. 11, pp. 211-246.

ENDERLEIN, G. 1921. Das System der Kriebelmücken (Simuliidae). Dt. tierärztl. Wschr. vol. 16, pp. 198-200.

GRENIER, P. 1953. Simuliidae de France et d'Afrique du Nord. Encycl. entomol. (Ser. A) vol. 29, 170 pp.

KNOZ, J. 1965. The identification of Czechoslovakian black-flies (Diptera, Simuliidae). Folia Fac. Sci. nat. Purkynianae Brunnensis (Biol.) 2, vol. 6(5), 54 pp. +425 Abb.

MEIGEN, J. W. 1804. Klassifikazion und Beschreibung der europäischen zweiflügligen Insekten. I. Reichard, Braunschweig, pp. 1-152.

—1838. Systematische Beschreibung der bekannten europäischen zweiflügli-

gen Insekten. VII. Schulz, Hamm, 434 pp.

MORGE, G. 1974. Johann Wilhelm Meigen. Beitr. Entomol., vol. 24

Sonderheft), pp. 93–160.

——— 1976. Dipteren-Farbtafeln nach den bischer nicht veröffentlichten Original-Handzeichnungen Meigens: 'Johann Wilhelm Meigen: Abbildung der europaeischen zweiflügeligen Insekten, nach der Natur'. Pars 1. Beitr. Entomol., vol. 25, pp. 383–500.

PAVLOVSKY, E. N. 1951. Bloodsucking Diptera, their significance and

control. Leningrad. 120 pp. (in Russian).

RIVOSECCHI, L. 1978. Simuliidae Diptera Nematocera. Fauna Ital. vol. 13,

555 pp.

—— & CARDINALI, R. 1978. Contributo alla conoscenca dei Simuliidi Italiani. XXIII. Nuevi dati taxonomici. Riv. Parassittol. vol. ??, pp. 26–78. RUBTSOV, I. A. 1940. Black-flies (Fam. Simuliidae). Fauna SSSR vol. 6(6).

533 pp. (in Russian).

- ——1956. Black-flies (Fam. Simuliidae) (2nd edition). Fauna SSSR (N.S.) No. 64, Diptera vol. 6(6), 859 pp. (in Russian).
- ——1959–1964 Simuliidae (Melusinidae) (parts). *In* LINDNER, E. (Ed.): *Fliegen palaearkt. Reg.* vol. 111 4, 689 pp.

USSOVA, Z. V. Fauna of black-flies of Karelia and Murmansk Region (Diptera, Simuliidae), Moscow-Leningrad, 7 pp. (in Russian).

ZWICK, H. & CROSSKEY, R. W. 1980. The taxonomy and nomenclature of the blackflies (Diptera: Simuliidae) described by J. W. Meigen. *Aquatic Insects* vol. 2(4), pp. 225–247.

COMMENT ON THE PROPOSED CONSERVATION OF THE SPECIFIC NAME *LATIPES* MEIGEN, 1804 (DIPTERA, SIMULIDAE) IN ITS FORMER MISIDENTIFIED SENSE, AND REOUEST FOR ALTERNATIVE ACTION. Z.N.(S.)2393.

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The species of SIMULIIDAE concerned in Dr Rubtsov's proposal is widespread across the Holarctic region. As with many simuliids, it may prove to be a sibling species complex, but in the morphological sense of current taxonomy is a species that often needs to be identified in its early stages because it is a common component of stream and river faunas that are prospected for faunistic or ecological studies.

2. As Rubtsov states, the pioneer work of Edwards, 1915; 1920, established an identity for 'latipes' by applying this name to a species